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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/787,277

02/26/2004

Vic Fielding

BA1525-992/04476

5159

24118

7590

08/08/2005

HEAD, JOHNSON & KACHIGIAN

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EXAMINER

CARPIO, IVAN HERNAN

ART UNIT

PAPER NUMBER

2841

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/787,277

Applicant(s)

FIELDING, VIC

Examiner

Ivan H. Carpio

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5,6,8,9,11,14 and 15 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 5,6,8,9,11,14 and 15 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 June 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Objections

Claim 11 and 15 are objected to for containing spelling errors, deattachable is incorrect and should be changed to detachable

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.



Claim 5,6,9,11,14 and 15⁸ rejected under 35 U.S.C. 103(a) as being unpatentable over Lusby (US Patent 5162729) in view of Davis (US Patent 5424921).

With respect to claim 11 Lusby teaches a printed circuit board (Fig. 2 and 4) and housing (column 3, lines 29-33) assembly, said assembly comprising: at least one detachable test port portion (Fig. 2, element 24 and Fig. 4, element 124) on said printed circuit board and that the test port portion can be removed prior to inserting it into the housing (column 3, lines 29-33); Lusby does not specifically teach obstruction means in the housing for obstructing location of the printed circuit board in the housing unless at

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least a portion of the printed circuit board having at least one test ports provided thereon has first been removed. However it is well known in the art to make the housing and printed circuit board approximately the same size as shown by Davis (Fig.1); doing so would make the a wall of the housing the obstructing means because the printed circuit board (Lusby Fig. 2) with the testing port portion (Lusby Fig. 2, element 24) would not fit unless the testing port portion were removed, Lusby teaches that to conserve space the portion 24 would be removed completely (column 3, line 32). It would have been obvious to one of ordinary skill in the art at the time of the invention to size the housing and printed circuit board (taught by Lusby) to be approximately the same size (as taught by Davis) therefore making it necessary to remove the test port portion in order to install the printed circuit board in the housing because doing so requires less material for the housing, making the manufacture of the electronic assembly financially efficient.

With respect to claim 5 and with all the limitations of claim 11 Lusby teaches that at least one test port portion is provided on a peripheral edge (Fig. 2, element 24 the right edge) of said printed circuit board body (Fig. 2).

With respect to claim 6 and with all the limitations of claim 11, Lusby teaches that said at least one test port portion (Fig. 2, element 24 the left edge) is provided within peripheral edges of said printed circuit board body and detachment of said at least one test port portion from said body results in one or more apertures(Fig. 2, note that if element 24 is removed and aperture is created) being provided in said body.

With respect to claim 8 and with all of the limitations of claim 11, Lusby teaches

that said obstruction means (Davis Fig. 1, the housing wall) in said housing includes at least one protruding member.

With respect to claim 9 and with all the limitations of claim 11, Lusby teaches that said printed circuit board is a multi-layered board (Fig. 1) and said at least one electrically conductive track (Fig. 1, elements 20) is provided on an inner layer thereof.

With respect to claim 14 and with all of the limitations of claim 11, Lusby teaches at least one electrical component (Fig. 2, element 22); at least one electrically conductive track (Fig. 2, element 16) and a body (Fig. 2, element 12) with at least one surface provided for the location of said at least one electrical component thereon and said at least one electrically conductive track for electrically connecting said at least one electrical component in a required arrangement, at least a portion of the body having at least one test port (Fig. 2, elements 30) thereon for allowing testing (column 2, lines 46-52) of one or more functions of said printed circuit board, electrical conductive tracks and/or electrical components, and at least one test portion of the body provided with said at least one test port is detachably attached (column 3, lines 29-32) to said printed circuit board body to allow removal therefrom.

With respect to claim 15 and with all the limitations of claim 11, Lusby teaches that said at least one detachable test port portion is detachably attached (Fig. 1 and Fig. 2 note the test port portion is shown to have been broken from the printed circuit board) to said body of said printed circuit board by attachment means selected from the group

consisting of frangible portions, clips, perforations and slots.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patent 5544069 teaches a programmable circuit board, US Patent 5010446 teaches a circuit board with test ports, US Patent 5155378 teaches a circuit board with ports to code.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ivan H. Carpio whose telephone number is 571-272-8396. The examiner can normally be reached on M-R 6:00am - 4:30pm.

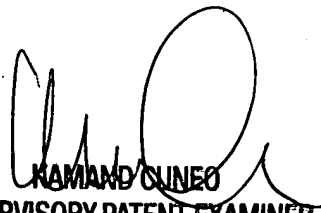
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kammie Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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